

Efficient Distribution and Utilization of Materiel and Repair Shops at
Oil Fields (cont)

93-6-3/20

4) the reorganization of the supply of spare parts and assembly units by establishing a system of spare parts stores, located close to the points of demand, 5) the expansion of the construction of mobile repair shops, 6) the preparation of standard charts for the repair of equipment and production of spare parts, 7) the study of the repair shop structure in every oil Association and the closing of those which do not operate at full capacity, the 8) discontinuance of capital repairs and scrapping of obsolete equipment, 9) the construction of plants in the Eastern regions of the USSR for the production of oil machinery, control instruments, and spare parts.

AVAILABLE: Library of Congress

Card ~~xxx~~ 5/5

PHASE I BOOK EXPLOITATION

SOV/4637

Berkhman, Lev Isaakovich

Novoye burovoye oborudovaniye (New Drilling Equipment) Moscow, Gostoptekhizdat, 1960. 181 p. Errata slip inserted.

Executive Ed.: Ye. A. Shakhmayeva; Tech. Ed.: A. V. Trofimov.

PURPOSE: This book is intended for engineers, drilling foremen, and skilled workers concerned with oil and gas-well drilling; it may also be used by students at schools of higher education.

COVERAGE: The book reviews briefly the development of drilling equipment design in the Soviet Union since 1945, and describes in detail the new standard series of drilling rigs developed since 1955. It discusses the special features of the new rigs and presents data on their testing and operation. Among the equipment developed since 1955 are: new axial drilling pumps, mechanical wrenches and chokes for lowering and lifting operations, heavy duty U8-4 and U8-6 drilling pumps, Uralmash-9D and Uralmash-11D drilling rigs, and self-powered BU-50 and BU-75 drilling rigs with devices for the mechanization and automatization of the drilling operations. No personalities are mentioned. There are 28 references, all Soviet.

~~Card 2/3~~

BERKHMAN, L.I. |

First results of the operation of U8-4 pumps. Mash. i neft.
obor. no.9:7-9 '63. (MIRA 17:2)

1. Gosudarstvennyy komitet khimicheskoy i neftyanoy
promyshlennosti pri Gosplane SSSR.

AYZENBERG, B.L.; BERKMAN, Ye.I.; DMITRIYEV, V.M.; KLEBANOV, L.D.; SHAROVA, L.I.

Unit norms of electric power spent on communal and everyday requirements of the population and unit loads in the future according to districts in the U.S.S.R. Trudy LIEI no.51:9-52 '64.

(MIRA 18:11)

AYZENBERG, B.L., doktor tekhn. nauk; DMITRIYEV, V.M., kand. tekhn. nauk;
KLEBANOV, L.D., kand. tekhn. nauk; SHAROVA, L.I., inzh.;
BERKHMAN, Ye.I., kand. ekonom. nauk

Technical and economic premises in the selection of the form
of energy for consumer needs in cities in the U.S.S.R.
Elektrichestvo no.11:71-75 N '65. (MIRA 18:11)

1. Leningradskiy inzhenerno-ekonomicheskiy institut imeni
P. Tol'yatti (for all except Berkman). 2. Lengiproinzhproyekt
(for Berkman).

ACC NR: AP6013616

SOURCE CODE: UR/0105/65/000/011/0071/0375

AUTHOR: Ayzenberg, B. L. (Doctor of technical sciences); Dmitriyev, V. M. (Candidate of technical sciences); Klebanov, L. D. (Candidate of technical sciences); Sharova, L. I. (Engineer); Berkman, Ye. I. (Candidate of economical sciences) 23B

ORG: [Ayzenberg, Dmitriyev, Klebanov, Sharova] LIEI im. P. Tol'yatta; [Berkman] Lengiproinzhpoyekt

TITLE: Engineering-economic reasons for the choice of the type of energy for household consumption in the cities of the USSR

SOURCE: Elektrichestvo, no. 11, 1965, 71-75

TOPIC TAGS: electric power production, economics, electric industry

ABSTRACT: The department of electric energy of LIEI (Leningrad Engineering-Economic Institute) carried out over a number of years investigations of the specific needs of household and communal consumers of electricity. These studies resulted in the establishment of standards of consumption of electric energy for the various regions and various types of consumers (Udel'nyye elektropotrebleniye na zhilishhno-bytovyye i kommunal'nyye nuzhdy nagruzki na perspektivnyy period po rayonam SSSR /Specific norms of needs for electricity of household and communal consumers and specific loads for the projected period according to the rayons of the USSR), Trudy LIEI-LENTOEP (Reports of the

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UDC: 338.40:621.3

L 22430-66

ACC NR: AP6013616

LIEI-LENTOEP), No 51, 1964). In particular, their calculated average for the entire Soviet Union is 1740 kWh per year per person. There is, however, no uniform view on this problem and the conference for electrification of households held in 1961 recommended the adoption of 2,000 kWh per year per person as the number to be used in the planning of future needs. The authors of this article take issue with this and other such figures which they consider exaggerated, and after an extensive discussion centering mostly on the gas versus electricity controversy show that 1) the engineering-economical calculations indicate that in all regions which can procure natural gas the use of gas for cooking is undoubtedly less expensive; 2) flow type water heaters cannot compete with any type of gas water heating (natural or artificially produced gas); 3) regions in the Soviet Union which do not need air-conditioning cannot hope to satisfy economically their needs for heat by means of electricity (except for regions which have an ample supply of inexpensive hydro-electric power, and where fuel is expensive on account of transportation difficulties). Orig. art. has: 2 tables. [JPRS]

SUB CODE: 09, 05 / SUBM DATE: 11Jan65 / ORIG REF: 015

Card 2/2 BLG

BERKMAN, R.Ya.

Detection of higher even harmonics. Geofiz. prib. no. 12:52-60
'62. (MIRA 17:5)

1. Institut mashinovedeniya i avtomatiki AN SSSR.

MIKHAYLOVSKIY, V.N., otv. red.; AFANASENKO, M.P., red.; BERKMAN, R.Ya., kand. tekhn. nauk, red.; BLAZHKEVICH, B.I., kand. tekhn. nauk, red.; SINITSKIY, L.A., kand. tekhn. nauk, red.; ROZENBLAT, M.A., doktor tekhn. nauk, red.; REMENNIK, T.K., red.; KOSNITSER, D.M., red.

[Magnetic elements of automatic control, remote control, measurement techniques, and computer engineering; transactions] Magnitnye elementy avtomatiki, telemekhaniki, izmeritel'noi i vychislitel'noi tekhniki; trudy. Kiev, Naukova dumka, 1964. 651 p. (MIRA 18:2)

1. Vsesoyuznoye nauchno-tekhnicheskoye soveshchaniye po magnitnym elementam avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki, L'vov, 1962. 2. Chlen-korrespondent AN Ukr.SSR (for Mikhaylovskiy).

BERKHMAN, V.Ye., inzh.

Graphic method of determining the capacity of regulators of direct
action pressure and the loss of pressure in gas filters. Sbor. rab.
Lengiprcinzhpoehta:44-50 0 '61. (MIRA 18:1)

MONAKHOV, N.I., inzh., glavnyy red.; TURIANSKIY, M.A., inzh., zamestitel' glavnogo red.; BERKHMAN, Ye.I., kand.ekon.nauk, red.; KHAVIN, B.N., red.izd-va; BOROVIKOV, N.K., tekhn.red.

[Collection No.29 of consolidated cost indexes of gas mains, gas industry buildings, and installations of urban gas-supply systems to be used in revaluating capital assets] Sbornik no.29 ukрупnennykh pokazatelei stoimosti zdaniy i sooruzheniy gazovoy promyshlennosti, magistral'nykh gazoprovodov i gorodskogo gazovogo khoz'yaistva dlia pereotsenki osnovnykh fondov. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1959. 65 p.

(MIRA 13:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.

(Gas industry--Equipment and supplies)

(Gas pipes)

BERKMAN, Yevgeniy I. sayevich; BRENTS, A.D., nauchn. red.;
DESHALYT, M.G., ved. red.

[Economics of gas supply systems] Ekonomika sistem gazo-
snabzhenia. Leningrad, Nedra, 1964. 226 p.
(MIRA 17:9)

BERKHMEREV, V. I.

Stock and Stockbreeding

Scientific and methodological conference of candidates for degrees at the All-Union
Institute of Animal Husbandry. Sots. zhiv. 14 no. 3, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1952 Uncl.

BEREZIN, O.A., inzh.; BERKHOV, N.F., inzh.

Calculation of the mechanical strength of the elastic element of the centering collar of a turbogenerator acted upon by an axisymmetrical load. Vest.elektrom. 32 no.2:18-23 F '61.

(Turbogenerators)

(MIRA 15:5)

BERKHOVSKAYA I. N.

PA 10749

USSR/Medicine - Isotopes, Radioactive Mar 1947
Medicine - Tracers, Radioactive

"Artificially Radioactive Isotopes and Their Use
in Biology and Medicine," I. N. Berkhovskaya, 20 pp

"Uspekhi Sovremennoy Biologii" Vol XXIII, No 3

Discusses artificial radioactivity, obtaining radio isotopes, the characteristic of radio isotopes, extraction and enrichment of radio isotopes, radio isotopes in an organism, observation of radio isotopes, principles of work with radio isotopes, use of radio isotopes with large and small radiation activity. Includes five pages of tables giving characteristics of various radio isotopes.

10749

BERKHOVSKIY, B. I., KURMAYEV, F. A., BELYKH, L. G., and BETIN, V. T.

"Moisture Control of a Furnace Charge by the Neutron Method"

paper presented at the All-Union Seminar on the Application of
Radioactive Isotopes in Measurements and Instrument Building,
Frunze (Kirgiz SSR), June 1961)

So: Atomnaya Energiya, Vol 11, No 5, Nov 61, pp 468-470

BERKHOVSKIY, I. M., PROF

PA 11/49794

USSR/Minerals
Coal

Nov 48

"Let Us Speed Up the Process of Dressing and
Briquetting Coal in the Coal Industries," Prof I. M.
Verkhovskiy, 2 pp

"Ugol'" No 11 (272)

Cites five-year plan law on these subjects. De-
scribes problems involved: lack of machinery,
absence of a special institute, and unsatisfactory
personnel.

14/49794

BERKHOYER, I.D.

Determining the calcium and iron in synthesized mixes by the aid of
the DRUS-3 long-wave X-ray spectrometer. Trudy Iuzhgiptsementa
no.5:102-123 '63. (MIRA 17:12)

BERKHOYER, I.D.

Use of the X-ray spectral method in the cement manufacture.
Zav. lab. 29 no.9:1081-1082 '63. (MIRA 17:1)

1. Gosudarstvennyy institut po proyektirovaniyu tsementnykh
zavodov v yuzhnykh rayonakh SSSR.

BERKHOYER, I.D.

THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

Determining the silica content in synthesized mixes with the aid
of the DRUS-3 long-wave X-ray spectrometer. Trudy Uzhgiprotsementa
no.6:42-57 '64. (MIRA 17:12)

BERKHOFER, L. D.

Berkhoyer, L. D. -- "Positive Thermionic Emission of Metals in the Presence of Halogens." Cand Phys-Math Sci, Khar'kov State U, Khar'kov 1953. (Referativnyy Zhurnal-Fizika, Jan 1954)

SO: SUM 168, 22 July 1954

BERKHoyer, L. D.

137-58-1-1528

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 203 (USSR)

AUTHORS: Sinel'nikov, K. D., Berkhoyer, L. D.

TITLE: The Fundamental Characteristics of the Phenomenon of Increase in Positive Thermionic Emission of Metals in the Presence of Halides (Ob osnovnykh kharakteristikakh yavleniya uvelicheniya polozhitel'noy termoionnoy emissii metallov v prisutstvii galoidov)

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1955, Nr 64, pp 103-115

ABSTRACT: Thermionic emission is highly sensitive to the entry of halides into the space between the electrodes. Preliminary experiments have shown that substitution of certain metals (or halides) by others does not affect the qualitative aspect of the phenomenon. Therefore, Ni was chosen as the emitting electrode and CCl_4 was chosen as the halide for purposes of the investigation. At atmospheric pressure, the appearance of a positive current of about 10^{-12} amp was noted even at about 400° , and this current increased rapidly with rising temperature. Depending upon the voltage, the emission current tended to saturation at about 300 v. The relationship of the saturation

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137-58-1-1528

The Fundamental Characteristics of (cont.)

current to temperature is closely described by an exponential equation. Addition of insignificant quantities of CCl_4 to the air results in a manifold increase in the positive current. The increase in the current is dependent, for all practical purposes, only upon the quantity of CCl_4 vapor and is not dependent upon atmospheric pressure in the interval between 5 and 760 mm Hg. An appreciable dependence upon the CCl_4 concentration is observed. As this factor increases, the current increment Δi increases, attains a maximum, and then declines. When air and mixtures thereof with CCl_4 vapors are admitted repeatedly, the relative increase in current proves to be greatest at the first introduction of the CCl_4 , i. e., when the Ni was "fresh". The thermionic emission current declines with time. This diminution is the more rapid, the greater the concentration of CCl_4 vapors and the higher the temperature. This poisoning of the emitting surface may be eliminated by mechanical removal of the "poisoned" layer. Chemical and x-ray analysis show that NiCl_2 , the thickness of which is several μ , forms on the surface of the Ni.

I. D.

1. Metals--Ion emission 2. Halides--Applications

Card 2/2

BERKHOFER, L.D.

137-58-1-1529

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 203 (USSR)

AUTHORS: Sinel'nikov, K. D., ~~Berkhofer, L. D.~~

TITLE: Mass-spectrometric Study of the Duration of Thermionic Emission by Nickel in the Presence of Carbon Tetrachloride Vapors (Mass-spektrometricheskoye izucheniye polozhitel'noy termoionnoy emissii nikelya v prisutstvii parov chetyrekhkhlorigo ugleroda)

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1955, Vol 64, pp 117-123

ABSTRACT: Mass-spectrometric analysis of the positive ion flux emitted by red-hot Ni (RzhMet 1958, Nr 1, abstract 1528) was performed with a special magnetic mass spectrometer permitting analysis of ions with masses ranging to 200 mass units. In an air atmosphere the ionic flux consisted chiefly of K and Na ions, and, to a considerably smaller extent, of ions of other alkali metals. When CCl_4 vapors are introduced into the emitter chamber, the emission of K^+ and Na^+ diminished, and a maximum appeared corresponding to mass 32. The latter is identified with O_2^+ ions. In addition, ions of mass 18, considered to be H_2O^+ , appeared in considerable numbers, and sometimes the C^+ , N^+ , CN^+ ions

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137-58-1-1529

Mass-spectrometric Study (cont.)

and various other combinations of C, N and perhaps O and H were present. It is held that the emitting surface is a layer of NiCl_2 on a Ni backing, in which atomic Cl, O, and other elements have been absorbed. As a result of reaction between O_2 and Cl, formation of O_2^+ and Cl^- occurs. After conversion of all the Cl atoms to Cl^- , further formation of O_2^+ ceases. This state corresponds to the "poisoning" of the emitting surface. If the NiCl_2 layer is thin, the ionization process may continue, thanks to the neutralization of Cl^- by the metallic backing. This explains the fact that the effect is highly sensitive to small amounts of halides.

1. Nickel--Ion emission 2. Carbon tetrachloride--Applications

I. D.

Card 2/2

BERKHSENIUS, N. S.

PA 77T66

USSR/Medicine - Insects
Medicine - Taxonomy

Apr 1948

"On the Revision of the Family Eriococcus Sign (In-
secta, Homoptera, Coccoidae)," N. S. Berkhsenius, Zool
Inst, Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LX, No 3

Presents revised classification and arrangement of
subject species. Submitted by Acad Ye. N. Pavlovskiy
23 Feb 1948.

77T66

BERKHSENIUS, N. S.

PA 55/4973

USSR/Biology - Scale Insects
Medicine - Entomology

Dec 48

"New Scale Insects (Homoptera, Coccoidea) of the Family Pseudococcidae From Central Asia," N. S. Berkhseiniy, Zool Inst, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol XIII, No 5

Of the new types of scale insects, members of the fauna of the Iranian-Turanian Province, four genera--Neotrionymus, Panatrionymus, Micrococcoides and Kiritshenkella--belong to a group similar to the Pseudococcus Westw., and the other two--Melosoma and Trebutinella--to two other groups.

55/4973

USSR/Biology - Scale Insects (Contd)

Dec 48

Phylogenetic Groups of scale insects. Submitted by Acad Ye. N. Pavlovskiy 18 Oct 48.

55/4973

BANHIDI, Zoltan, dr.,; BERKI, Ervin, dr.

Endocardial fibroelastosis in infants. Gyermekgyógyászat 6 no.6:
161-171 June 55.

1. A pécsi Orvostudományi Egyetem Gyermekklinikájának (igazgató:
dr. Kerpel-Fronius Odon egyetemi tanár) és Kóronctani Intézetének
(igazgató: dr. Romhányi György egyetemi tanár) közleménye.
(CARDIAC ENLARGEMENT, in inf. and child
fibroelastosis)

KELENYI, Gabor,; BERKI, Ervin.

Implantation of tumor cells into the peritoneum. Kiserletes
orvostud. 7 no.3:288-292 May 55.

1. Pecsí Orvostudományi Egyetem Korbonctani es Korszovertani
Intezete.

(NEOPLASMS, transplantation,
intraperitoneal)

(PERITONEUM, neoplasms,
exper., tumor implant)

BERKI, ERVIN
BERKI, Ervin

Spirometric examinations on cadaveric lungs. *MAGY. belorv. arch.*
10 no.4:106-109 Aug 57.

1. A Pécsi Orvostudományi Egyetem Kóronctani Intézetének (igazgató:
Romhányi György dr. egyetemi tanár) közleménye.
(LUNGS, pathol.
spirometric studies on cadaveric lungs (Hun))

HAIMOS, Tamas, Dr.; BERKI, Ervin, Dr.

Chronic arsenic poisoning causing liver cirrhosis and kidney lesions.
Orv. hetil. 99 no.52:1835-1837 28 Dec 58.

1. A Janos Korhaz (igazgato: Tako Jozsef dr.) I. sz. Belosztalyanak
foorvos: Koranyi Andras dr.) kozlemenye.

(ARSENIC, pois.

chronic pois. causing ascites, liver cirrhosis & kidney
samage (Hun))

(ASCITES, etiol. & pathogen.

chronic arsenic pois. causing ascites, liver cirrhosis &
kidney damage (Hun))

(LIVER CIRRHOSIS, etiol. & pathogen.
same)

BERKI, R

43. The effect of ageing on the ultraviolet spectra of ergot alkaloids. A. Baker, R. Berki *Magyar Kémiai Polymert.* Vol. 61, 1955, No. 2, pp. 245-286, 2 figs.

Old Chem 2

It is known that the ergot type alkaloids show certain ageing properties (decomposition) caused by the action of light and air whether in a solid or dissolved form. Investigating the ultraviolet spectra of these alkaloids it was established that the absorption of the aged or hydrogenated products differs from the absorption of the natural alkaloids. It was assumed that there is a correlation between the ageing phenomena and the double bond in the quinoline ring as the saturation of this double bond by hydrogenation yields very stable compounds. The absorbance of a 0.5 M phosphoric acid solution containing 0.01% of alkaloids was measured by means of a Beckman DU spectrophotometer in a 10 mm cell at 270 μ m and 315 μ m wave length. It was found that the value of the quotient R_{270}/R_{315} decreased proportionally with the amount of the decomposed product present in the sample. A similar relationship was found in the presence of hydrogenated alkaloids. Based on these spectral data the ratio of natural and hydrogenated alkaloids contained in a mixture may be calculated by the following formulae (referred to the molecular weight of ergocristine): natural alkaloids, $F_{270} \times 85.6$ μ g per ml and hydrogenated alkaloids, $(R_{270} - 0.228 \times R_{315}) \times 115$ μ g per ml. The procedure proved to be suitable for the rapid and accurate determination of the respective amounts of natural and modified (aged or hydrogenated) alkaloids in different products.

EM

BERKI, Ervin, dr.; KORANYI, Andras, dr.; LISZKA, Gyorgy, dr. MAJOR,
Eleonora, dr.

Anorganic content of intact and atherosclerotic aortas. Qrv.
hetil. 106 no.5:201-203 31 Ja '65.

1. Fovarosi Tanacs, Janos Korhaz, I. Belosztaly (foorvos:
Koranyi, Andras, dr.).

NEMETH, Arpad; BERKI, Ferenc

Instrumental examination of canning industry drying apparatus.
Elelm ipar 19 no.4:108-115 Ap '65.

1. Central Research Institute of Food Industry, Budapest (for Nemeth); 2. Canning and Paprika Industry Research Institute, Budapest (for Berki).

BERKI, Karoly; NAGY, Lajos; MATE, Miklos; JUHASZ, Imre; LEIDECKER, Lajos, dr.

Debate on the recording of local council minutes and the relevant judicial practice. Kozleked kozl 21 no.7:117-122 - 14 F '65.

BERKIAROV, E.

Method for group work on details. p. 10.

TEZHKA PROMISHLENOST. (Ministerstvo na tezhkata promishlenost) Sofia, Bulgaria.
Vol. 8, no. 9, Sept. 1959.

Monthly List of East European Accessions (EEAL) LC, Vol. 9, no. 2, Feb. 1960.
UNCL

BERKIN, N.G.; KRYLOV, N.G.

Calculating the parameters of a machine for building bicycle
tire casings. Kauch.i rez. 21 no.2:28-34 F '62. (MIRA 15:2)

1. Yaroslavskiy tekhnologicheskii institut i Nauchno-issledovatel'skiy
konstruktorsko-tekhnologicheskii institut shinnoy promyshlennosti,
Omsk.

(Bicycles and tricycles--Tires)

BERKIN, N.S.

Results of snow survey measurements in the upper reaches of the
Lena River. Trudy TSTP no.129:51-60 '64.

(MIRA 17:10)

BERKINA, F.Ye.; BOGOLEPOVA, L.S., prof., red.; KONSTANTINOV, G.P., tekhn.red.

[Central Institute of Health Education Research] Tsentral'nyy
nauchno-issledovatel'skii institut sanitarnogo prosveshcheniia.
Moskva, 1956. 30 p. (MIRA 11:6)

1. Russia (1923- U.S.S.R) Ministerstvo zdavookhraneniya.
(HEALTH EDUCATION)

BERKINA, S. N.

BERKINA, S. N. -- "On the Problem of Calculating the Strength of Arches of Arbitrary Geometry." Min Railways USSR. Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers imeni I. V. Stalin. Moscow, 1955. (Dissertation for the Degree of Candidate of Technical Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

BERKINA, S.N., assistant

Calculation of the strength of arches of various shapes.
Trudy OTIP i KHP 8 no.1:121-131 '57. (MIRA 12:8)

1. Kafedra soprotivleniya materialov Odesskogo tekhnologicheskogo
instituta pishchevoy i kholodil'noy promyshlennosti.
(Arches)

BERKINA, S.N. (Odessa)

Designing linings of tunnels with arbitrary outlines. Stroi. mekh.
1 rasch. soor. 2 no.5:14-21 '60. (MIRA 13:9)
(Tunnels)

BERKINA, S. N.

Cand Tech Sci - (diss) "Calculations of rod designs with curvilinear elements by the method of initial parameters." Leningrad, 1961. 20 pp; with diagrams; (Leningrad Order of Lenin Inst of Railroad Transport Engineers imeni Academician V. N. Obraztsov); 150 copies; free; (KL, 10-61 sup, 213)

L 19349-63

EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AR3005188

S/0272/63/000/007/0036/0036

SOURCE: RZh. Metrologiya i izmer. tekhnika. Otd. vy*p., Abs. 7.32.243

AUTHOR: Berkina, S. S., Likhnitskiy, G. V., Spasskiy, K. F. 56

TITLE: Study of the process of constraint of force measuring elements of tensometric resistance pickups for investigating the stabilization of their elastic properties

CITED SOURCE: Tr. Odessk. tekhnol. in-ta pishch. i kholodil'n. prom-sti, v. 11, 1962, 165-169

TOPIC TAGS: tensometer calibration, tensometer, stress pickup, elasticity

TRANSLATION: The authors describe a testing procedure for investigating the effect of the time of constraint of the flexible elements of stress pickups with respect to the stabilization of their elastic properties. The results of the experiment showed that the duration of application to the sample of a load producing in it stresses close to the proportionality limit does not affect the magnitude of its absolute deformation if the time of load application is not over

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L 19349-63

ACCESSION NR: AR3005188

30-40 min. With loading of 30-70 min duration, the magnitude of the absolute deformation falls off. After 70-80 min of load application, the absolute deformation of the sample remains practically constant. Further studies showed that the increased sample rigidity acquired during the process of constraint is retained in time. N. Komissarova.

DATE ACQ: 24Jul63

SUB CODE: GE

ENCL: 00

Card 2/2

BERKINBAYEV, F.

USSR/Cultivated Plants. Cereals.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77646.

Author : Yudin, D.; Derkinbaev, F.

Inst :

Title : Sorghum in the Desert Regions of Priaral'ye.

Orig Pub: S. kh. Kazakhstana, 1957, No 12, 17-20.

Abstract: No abstract.

Card : 1/1

ARSHAVSKIY, Yu.I.; BERKINBLIT, M.B.; KOVALEV, S.A.

Place of the appearance of transformation rhythm in the nerve
fiber with artificially produced inhomogeneity. Biofizika 7
no.5:619-623 '62. (MIRA 17:8)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

BERKINBLIT, M.B.; KOVALEV, S.A.; SMOLYANINOV, V.V.; CHAYLAKHYAN, L.M.

Inlet resistance of syncytial structures. Biofizika 10 no.2:309-316
'65. (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

BERKINBLIT, M.B.; KOVALEV, S.A.; SMOLYANINOV, V.V.; CHAYLAKHYAN, L.M.

Electric structure of the myocardial tissue. Dokl. AN SSSR 163 no.3;
741-744 J1 '65. (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR. Submitted August 22, 1964.

ARSHAVSKIY, Yu.I.; BERKINELIT, M.B.

Somatotopic distribution of induced potentials in the paramedial lobe of the cerebellum. Fiziol.zhur. 50 no.4:418-425 Ap '64.
(MIRA 18:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

~~BERKINBLIT, M.B.~~; BURSHEYN, E.A.; L'VOV, K.M.; PULATOVA, M.K.;
ROZOVA, L.V.; FRANK, G.M., red.; PLYSHEVSKAYA, Ye.G.,
red.

[Cell biophysics] Biofizika kletki; sbornik statei pod
red. G.M.Franka. Moskva, Nauka, 1965. 294 p

(MIRA 19:1)

1. Akademiya nauk SSSR. Institut biologicheskoy fiziki.
2. Chlen-korrespondent AN SSSR (for Frank).

ARSHAVSKIY, Yu.I.; BERKINBLIT, M.B.; KOVALEV, S.A.; SMOLYANINOV, V.V.;
CHAYLAKHYAN, L.M.

Role of dendrites in the functioning of nerve cells. Dokl. AN SSSR
163 no.4:994-997 Ag '65. (MIRA 18:8)

1. Institut biologicheskoy fiziki AN SSSR. Submitted August 22,
1964.

BERKINBLIT, M.B.; KOVALEV, S.A.; SMOLYANINOV, V.V.; CHAYIAKHYAN, L.M.

Determination of basic electric characteristics of the myocardium of the frog's ventricle. Biofizika 10 no.5:861-867 '65.

Characteristics of the distribution of potential in syncytial structures. Ibid.:883-885 (MIRA 18:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

ARSHAVSKIY, Yu.I.; BERKINBLIT, M.B.; DUNIN-BARKOVSKIY, V.L.

Distribution of impulses in a ring of stimulated tissue.
Biofizika 10 no.6:1048-1054 '65. (MIRA 19:1)

1. Institut biologicheskoy fiziki AN SSSR, Moskva. Submitted
July 5, 1965.

ARSHAVSKIY, Yu.I.; BERKINELIT, M.V.; KOVALEV, S.A.

Periodic rhythm transformation in single nerve fibers. Biofizika
7 no.4:449-459 '62. (MIRA 15:11)

1. Institut biologicheskoy fiziki AN SSSR, Moskva, i Moskovskiy
gosudarstvennyy pedagogicheskiy institut imeni Lenina.
(NERVES) (PERIODICITY)

Anti-tuberculosis activity of a preparation with isonicotinic acid hydrazide. S. Triller, M. Lada, M. Berkova, and M. Tarvada. *Lubuska et al. Czechoslovak Chem Commun* 1952 No. 18 Whole No. 63, 1570-1576. Reaction of pyridine with KMnO_4 or H_2SO_4 with FeCl_3 as catalyst with air over V_2O_5 catalyst, with subsequent extraction with EtOH, and reaction with $\text{NH}_2\text{NH}_2 \cdot \text{H}_2\text{O}$ form a series of hydrazides. The preparation has bacteriostatic activity in 0.7% glycerol solution cultures of several *Mycobacterium* in diln. of $1:0 \times 10^8$ as compared to $1:8 \times 10^8$ for the pure isonicotinic acid hydrazide. Andrew Dravnieks

Distr: 4E2c(3)/4E3d 7

✓ Nitration of 2-furyl- β -nitroethylene. S. Hillert and M. Berkova. *Lahvijar PSK Zindagan Akad. Vestis* 1959, No. 3, 115-19. — The yield of 5-nitro-2-furyl- β -nitroethylene (I) in nitration of 2-furyl- β -nitroethylene by concd. HNO_3 (II) in Ac_2O was max. when the molar ratio of I to II was 1:4. This modified method gave 70-80% yields when dioxane was used for recrystn. V. S. Mihailov.

3
 1-9-9 (NA)
 2

Ah
 J

BERKLAID, I. M., and VIKHMAN, V. S.

Avtomaticheskii pribor dlia kontroliia tolshchiny gal'vanicheskikh pokrytii.
(Vestn. Mash., 1950, no. 6, p. 56-58)

Automatic apparatus for controlling the thickness of electroplating.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library
of Congress, 1953.

32 (3)

SOV/112-57-5-10652

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 5, p 156 (USSR)

AUTHOR: Berklayd, I. M.

TITLE: Automation of Checking Railroad Coach Axles and Wheels
(Avtomatizatsiya kontrolya vagonnykh osey i koles)

PERIODICAL: Tekhnol. transp. mashinostroyeniya, 1956, Nr 3, pp 30-34

ABSTRACT: Bibliographic entry.

Card 1/1

Berklayd, I.M.

112-1-1240

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957,
Nr 1, p.193, (USSR)

AUTHOR: Berklayd, I.M.

TITLE: Construction of Measuring Units of Automatic Control
Systems (Postroyeniye izmeritel'nykh blokov avtomati-
cheskikh kontrol'nykh ustroystv)

PERIODICAL: Obmen tekhn. opytom, Vses. proyektno-tekhnolog. in-t,
1956, Nr 5, 80 pp.

ABSTRACT: Bibliographic entry.

ASSOCIATION: All-Union Institute of Technological Design (Vses.
proyektno-tekhnol.-in-t)

Card 1/1

BERKLAYD, I.M.; KUROCHKIN, A.P.; LYAKHOVSKIY, A.V.; SHETKOV, A.M.; CHUDOV,
V.A.; BAYBUROV, B.S., red.; KOCHENOV, M.I., red.; MALYY, D.D.,
red.; BESPAKHOTNAYA, T.P., nauchnyy red.; YELISEYEV, M.S., red.
izd-va; TIKHANOV, A.Ya., tekhn.red.

[Transducers and measuring gages] Datchiki i izmeritel'nye golovki.
Pod red. B.S.Baiburova, M.I.Kochanova, D.D.Malogo. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 158 p.

(Transducers)

(Gages)

(MIRA 14:1)

PHASE I BOOK EXPLOITATION

SOV/5074

Berklayd, I. M., A. P. Kurochkin, A. V. Lyakhovskiy, A. M. Snetkov,
and V. A. Chudov.

Datchiki i izmeritel'nyye golovki (Pickups and Dial-Indicators)
Moscow, Mashgiz, 1960. 158 p. Errata slip inserted. 10,000
copies printed. (Series: Progressivnyye sredstva kontrolya
razmerov v mashinostroyeni)

Eds. of Series: B. S. Bayburov, M. I. Kochenov, and D. D. Malyy;
Scientific Ed.: T. P. Bepakhotnaya; Ed. of Publishing House:
M. S. Yeliseyev; Tech. Ed.: A. Ya. Tikhanov; Managing Ed. for
Literature on Instrument Construction and Means of Automation
N. V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for technical and design personnel
It may also be used by students specializing in instrument de-
signing at schools of higher technical education and tekhnikums.

COVERAGE: The authors discuss the designs, schematic diagrams, and
characteristics of pickups and dial-indicators used as inspection

Card 1/4

Pickups and Dial-Indicators

SOV/5074

devices. Electrocontact, pneumatic, inductive, and capacitive measuring systems and their pickups are described. Particular attention is given to special features of the designs, circuit diagrams, testing methods, and fields of application of these pickups. Specifications are also given. The book is a part of a larger work in the field of modern means of inspection which was recommended by the Commission on the Introduction of Advanced Methods and Means of Dimensional Inspection in Machine Building under the auspices of Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific Technical Committee of the Council of Ministers of the USSR). No personalities are mentioned. There are 15 references, all Soviet.

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Card 2/4

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Pickups and Dial-Indicators	SOV/5074
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AVAILABLE: Library of Congress

Card 4/4

VK/wrc/ec
6-15-61

PHASE I BOOK EXPLOITATION SOV/5839

Berklayd, I. M., V. S. Vikhman, A. T. Draudin, N. Ye. Kopanevich,
G. I. Ovcharenko, Z. L. Tubenshlyak, G. V. Chasovnikov and Ya. M. Tseytlin

Kontrol' nye avtomaty ([Dimensional-] Control Automatics) Moscow, Mashgiz,
1961. 193 p. (Series: Progressivnyye sredstva kontrolya razmerov v mashino-
stroyenii) Errata slip inserted. 4500 copies printed.

Eds. of Series: B. S. Bayburov, M. I. Kochenov, and D. D. Maly; Scientific
Ed.: V. S. Vikhman, Doctor of Technical Sciences; Ed. of Publishing House:
L. P. Stroganov, Engineer; Tech. Ed.: R. I. Dobritsyna; Managing Ed. for
Literature on Means of Automation and Instrument Construction: N. V. Pokrov-
skiy, Engineer.

PURPOSE: This book is intended for designers and technical personnel in machine
plants.

Card 1/1
2

Control Automatics

SOV/5839

COVERAGE: The book contains information on the most important Soviet late-model automatics for the inspection, sorting, and automatic control of machine parts according to their geometric parameters. The book is part of a series devoted to modern means of dimensional control and was recommended by the Commission on the Introduction of Advanced Control Methods and Means in the Machine Industry of the State Scientific-Technological Committee of the Council of Ministers of the USSR. Attention is given to the construction, operation, and specifications of a number of dimensional-control automatics for various purposes. Photographs and layout diagrams are included. No personalities are mentioned. There are no references.

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1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

BERKMAN, A. S. PROCESSES AND PROPERTIES INDEX

19

Whitening of porcelain by cobalt compounds. A. S. Berkman. *Engr. Mater.* 1928, No. 12, 10-20.
 The use of Co compds. in porcelain glazes improves the color and surface texture of porcelain ware. E. E. S.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBOLS FROM SYMBOLS

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

BERKMAN, A.S.

117 AND 119 CROSS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH CROSS

X-ray of porcelain. A. S. BERKMAN. *Sobremyie i Krasn. Prom.*, 1966, No. 10-11, pp. 18-19. — Data are given for visual observations of defects in porcelain with the aid of X rays (100 kv., $\lambda = 10$ nm.). For thicknesses of 28 to 55 mm., the minimum observed defects ranged from 1.25 to 2.00 mm., and for thicknesses of 56 to 92 mm., cracks 3.5 to 9.4 mm. deep and 0.15 to 0.50 mm. wide were observed. Greater accuracy was obtained by photography. B. Z. K.

Common Elements

OPEN MATERIALS INDEX

ASS-55A METALLURGICAL LITERATURE CLASSIFICATION

127

117 AND 119 CROSS

3RD AND 4TH CROSS

BERKMAN, A.S.

PROCESSING AND PROPERTIES INDEX

Effect of dispersion on the physicochemical properties of porcelain. A. S. BERKMAN. *Selol'nyy i Keram. Prom.*, 1963, No. 1-2, pp. 13-18.—A charge containing kaolin 30, clay 18, feldspar 20, quartz sand 20, and porcelain tile 5% was used to study the effect of dispersion of the components on porcelain formation and the characteristics of the porcelain. Analysis of the results indicates that for porcelain masses of a definite chemical-mineralogical composition there is an optimum degree of dispersion of the components. Variation of the degree of dispersion of the whole batch should be made by fine-grinding the nonclay components (chiefly quartz and feldspar). The degree of dispersion of quartz should be greater than that of feldspar. B.Z.K.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN MATERIALS INDEX

DESCRIPTIONS

ALPHABETIC INDEX

BERKMAN, A. S. CA

PROCESSES AND PROPERTIES INDEX

Filter presses with ceramic plates. A. S. Berkman. *State'svoje i Keram. Prom.*, 1943, No. 3, 17-19; *Ceram. Abstracts* 1943, 18 (in *J. Am. Ceram. Soc.* 31, No. 1). — Incomplete large-scale tests indicate the possibility of substituting porous ceramic plates for the filter cloths in filter presses. Plates having pores of 23 μ were best. Plates having diam. of up to 500 mm. were made as complete units, but those 800 mm. in diam. were made in four sectors which were joined with Portland cement. M. F. R.

ASS-31A METALLURGICAL LITERATURE CLASSIFICATION

137 AND 138 SERIES

139 AND 140 SERIES

COMMON ELEMENTS

COMMON VARIABLES INDEX

137 AND 138 SERIES

139 AND 140 SERIES

137 AND 138 SERIES

139 AND 140 SERIES

BERKMAN, A.S.

PROCEEDINGS AND PROPERTIES INDEX

Testing and eliminating instability of ceramic mixes. A. S. Berkman and A. I. Mikhailovskii. *Sobor' na ya i Korun. Press. 3, No. 11/12, 16-18(1940).* - Instability is defined as that property which causes a dense workable mix to spread out under the influence of slight jarring, resulting in a weak mix, difficult to work. There is a close

relationship between instability, and thixotropy and coagulation. "Instability" is not a direct consequence of alky, because thixotropic properties and instability were observed even for low values of alky. An increase in alky, up to a certain limit, increases instability, but after apparently passing an isoelec. point, instability is reduced. Variation of moisture content, within permissible limits for a workable mix, has no noticeable effect on instability. Instability of a mix depends upon the instability of the raw materials, chiefly kaolin. Instability is detd. by means of an instabilometer on which a sample 10 mm. in diam. and 20 mm. high is subjected to vibrations of a definite frequency and amplitude for 20 sec. The index of instability is the deformation in mm. Workable porcelain mixes are divided into 4 classes as shown by the index of instability: stable, 8-9 mm.; slightly stable, 9-10 mm.; unstable, 10-15 mm.; and highly unstable, more than 15 mm. Gypsum is recommended to overcome instability, about 0.25-0.30% by wt. of the porcelain mix. B. Z. Karnich. App. is illustrated.

19

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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19

BERKMAN, A. S.
CA

APPARATUS FOR MEASURING THE FLUIDITY OF CERAMIC BODIES.
A. S. BERKMAN AND A. I. MIKHAILEVSKII. U.S.S.R. 66,
579, MAY 31, 1947. M. H.

ASS. S.A. METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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BERKMAN, A. S.

15060

USSR/Glass Manufacture 4413.0600

Sep 1947

"Tunnel-like Direct Action Kiln for Sanitary Manufacture of Faience, without the Use of Saggars," Prof. A. S. Berkman, A. M. Barenboym, Engr, 3 pp

"Stek i Keram Prom" No 9

Discusses cycle of kilning and cooling, shrinkage of articles in transportation, requirements in constructing furnaces, layout of furnaces (including six detailed diagrams), and conclusions.

LC

15060

BERKMAN, A.S.

"The ceramic industry in the USSR and the outlook for its development,"
Authors: A.S. Berkman, G.L. Bruk, A.T. Bel'man (et al.), in symposium:
Syr'yevyye resursy tonkokeram. pron-sti SSSR i puti ikh ispol'zovaniya,
Moscow-Leningrad, 1948, p. 7-32

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

BERKMAN, A.S.

Berkman, A.S. "On a new way of determining the fluctuation of clay raw material in ceramic compositions," in symposium: Syr'yevyye resursy tonkokeram. prom-sti SSSR i puti ikh ipsol'zovaniya, Moscow-Leningrad, 1948 p. 155-58

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

CA

BERKMAN, N.S.

19

Ceramic materials of high mechanical strength (the high-frequency one). G. A. Buzdakov, A. A. Mikhlin, and A. M. Biderman. *Stal's i Kovan.* 6, No. 7, 17-22 (1966). — A mix for high-frequency use contained: talc 63, BaCO₃ 12, and Chinese-Yar clay 25%. With BaCO₃ content of 10-15%, the BaO changed into the vitreous phase completely; further increase in BaCO₃ resulted in practically no reduction of the dielectric losses. For 12.5% BaCO₃, ϵ_{20} reached the value of 0.0008. Sintering temp. of mixes contg. 10-12% BaCO₃ did not exceed 1330-1340°. The products had a bending resistance of only 800 kg./sq. cm. This was raised to 1450-1550 kg./sq. cm. by fine grinding of the talc (1% residue on the sieve of 10,000 openings/sq. cm.) and calcining it for 2 hrs. at 1300° prior to prep. the mix. Talc content in the mix was 60-70%, but for com. production 60% is recommended. By grinding the talc still finer (0.3% residue on the same sieve), the strength dropped to 1100 kg./sq. cm. The mach. strength of the steatite body reached a max. as soon as complete sintering took place (vitreous phase amounted to 35% by wt.). By raising the temp. or prolonging the firing, the amt. of the vitreous phase increased and the clinocrostatite crystals, which do not exceed 2-7 μ in normally fired products, became larger (10-30 μ). Under these conditions, the concentration of the clinocrostatite crystals by the grain was less compact than was observed in the initial period of firing. The strength remained practically unchanged with the type of atm. (oxidizing or reducing). By adding Al₂O₃ to the mix the intensive recryst. of the clinocrostatite was eliminated and loss in strength of the products avoided. The effects of admixts. of Al₂O₃, MgO, ZrO₂, BeO, ZrSiO₄, and TiO₂ were investigated; admixts. were added in amts. of 1-15% by replacing talc but keeping the other components constant. ZrO₂ and BeO increased the strength of the steatite; zirconia steatite also showed high thermal resistance. Be steatite had a firing temp. up to 1330°, bending strength of 1900 kg./sq. cm., and a ϵ_{20} of 0.0006-0.0008. B. Z. Kamich.

BERKMAN, A.S. 190 AND 4TH EDITION

PROCESSES AND PROPERTIES INDEX

e

Determination of gas permeability of porous ceramic materials.
 A. S. BERKMAN AND E. V. BARIN. *Soviet Ceram.*, 6 [8] 17-20 (1969). An apparatus is described for determining gas permeability both at room temperature of the filtering air and at 300° to 350°C. At room temperature, metered amounts of air pass through the sample contained in a cylinder connected to a draft gauge; for elevated temperatures, the air passes through the sample contained in an insulated, electrically heated cylinder connected to a draft gauge. Deviations of the gas permeability coefficient of ceramic filters at room temperature did not exceed 1.5 to 2% from the average. A diagram and photographs of the apparatus are given. U.Z.K.

METALLURGICAL LITERATURE CLASSIFICATION

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

BCA

RESEARCH, R.S.

Pottery

2918. Technology of coloured sanitary and structural faience.—A. S. BARKMAN and Z. I. GLUSHANKOVA (*Sovk. Keram.*, 9, No. 2, 13, 1952). Of the following methods for the production of coloured faience, (3) and (4) were best, ensuring uniform coloration in dark and in light shades: (1) covering the white faience body with coloured glazes, transparent or opaque; (2) colouring the body with solns. of colouring salts; (3) coating the body with coloured engobes to be covered with a colourless glaze; (4) colouring the body and then coating it with a colourless glaze. (1 table.)

BERKMAN, A. S.

Journal of the American
Ceramic Society
July 1954
Whiteware

①
Whiteness and translucence of porcelain as a function of firing temperature. A. S. BERKMAN, *Steklo i Keram.*, 10 [9] 21-25 (1953).--Porcelain mixes were fired at 1280° to 1410°C. The whiteness standard (100%) was barite plate. Whiteness of all mixes fired at 1320° was about the same (65 to 66%); firing at 1280° gave results, in general, as good as firing at 1320° and even better in some cases. Whiteness was highest for 1410°; it decreased with water absorption. Translucence increased with temperature up to 1320°; at 1410°, translucence decreased. For the same firing temperature, products with more of the vitreous phase showed greater translucence. Whiteness and translucence did not vary alike with temperature; translucence was affected more noticeably than whiteness by variations in firing.

B.Z.K.
my

Berkman, U.S.

Ceramic plates made with Leningrad raw materials for
building buildings. A. S. Berkman, *Chemist, Leningrad Inst.*
of Tech. - Institute of Tech. - Westvich, Street
1754, N. C. 71-88, *Research Institute of Tech. - Leningrad*
--The complete details for making of plates are
given

BERKMAN, A. S., and MEL'NIKOVA, I. G.

"Ceramic Porous Slabs for Aeration of Powdered Materials".
Sb. Tr. Resp. N.-I. In-ta Mestnykh Stroit. Materialov, No. 7, pp 37-54, 1954.

Describes construction and working details of ceramic slabs used in pneumatic chutes inclined at 4% to convey powdered cement over considerable distances. Air is forced through the slabs and maintains the cement in a free flowing condition. (RZhKhim, No 4, 1955)

SO: Sum No 884, 9 Apr 1956

150
151

BEREMAN, A.S.; kandidat tekhnicheskikh nauk; MML'NIKOVA, I.G., kandidat tekhnicheskikh nauk.

Porous plates for pneumatic chutes and silos of cement factories.
TSement 20 no.3:15-16 My-Je '54. (MLRA 7:7)
(Cement industries)

A. Berkman, A.S.

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27685

Author : A. Berkman, I. Leybman, S. Savenkov.

Inst :

Title : Improvement of Bricks of Low-Plastic Clays.

Orig Pub: Stroit. materialy, izdeliya i konstruktsii, 1956, No 9,
24-25

Abstract: General crumbling of bricks started at many Leningrad factories using clays which are little sensitive to drying. The study of the behavior of air-dried bricks in tunnel drying plants showed that crumbling was connected with the low plasticity of the charge and not with the regime of drying. The plasticity of clays not always determines their properties at drying. Besides the upper limit of the sensitivity factor, there is also a bottom limit, below which clays lose the necessary tenacity and the products crumble

Card : 1/2

-72-

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27685

at drying. Spoilage was eliminated by adding a great percentage of plastic clay. At the Krutyansk factory, the spoilage was decreased by raising the relative humidity of the heat carrier introduced into the drying chambers, as well as by adding more plastic clay to the charge.

Card : 2/2

-73-

BERKMAN, A. S.

USSR/Chemical Technology. Chemical Products and Their Application.
Glass. Ceramics. Building Materials.

J-12

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27602

Author : A.S. Berkman.

Inst : Republican Scientific Research Institute of Local Building
Materials.

Title : Study of Structure of Building Materials.

Orig Pub: Sb. tr. Resp. n.-i. in-t mestnykh stroit. materialov, 1956,
No 10, 123-127.

Abstract: The data illustrating the peculiarities of the structure of
silicate building materials together with an explanation of
the causes of the considerable difference in their factors of
air penetrability are given.

Card : 1/1

-2-

Structure of potato
tubers
The tubers are
formed in the
axils of the
leaves
of the plant
and are
usually
found in
the soil.

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PHASE I BOOK EXPLOITATION

SOV/3289

Berkman, Abram Samoylovich

Poristaya pronitsayemaya keramika (Permeable Porous Ceramics)
Moscow, Gosstroyizdat, 1959. 171 p. Errata slip inserted.
3,000 copies printed.

Ed. of Publishing House: M.N. Kuznetsova; Tech. Ed.: Ye.L. Temkina

PURPOSE: The book is intended for engineers, technicians and scientists engaged in the production, utilization and study of permeable ceramic products. It may also serve as a handbook in training engineers specializing in ceramics.

COVERAGE: The author states that the book is a systematic presentation of available data on the properties and manufacturing processes of porous permeable ceramics. He attributes past inadequacies of the industry to the inaccessibility of such data. The author stresses the importance of permeability

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problems and the structure of materials. He describes the method of determining the coefficient, permeability, the size of pores and their distribution within the material. The effect of technological factors on the properties of porous ceramics materials is reviewed in detail, irrespective of the ultimate purpose of the product. The author establishes rules for changes in the properties directly dependent upon the raw material involved, which are of considerable practical value to manufacturers in selecting material best adapted for their purpose. The book outlines the manufacturing process of the most permeable porous ceramics articles: filters for the mechanical purification and drying of liquids and gases, for separation of sediments and selective filtering; diaphragms for electrolytic processes; bacteriological filters to sterilize medicines, mineral water and food products; plates for aerating liquids in tanks where bacteria and fungi have developed; units for diffusing liquids and suspensions and for producing high temperature reactions in a boiling bed; sound-absorbing materials, etc. The last chapter deals with the use of ceramics for building materials, its frost-resistant properties and the manufacturing processes. No personalities are mentioned. There are 208 references: 132 Soviet, 40 English, 31 German, 5 French.

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BERKMAN, A.S.; MEL'NIKOVA, I.G.

Effect of the structure of pores on the frost resistance of
bricks. Stroi.mat. 6 no.4:34-37 Ap '60.

(MIRA 13:6)

(Bricks)

S/072/60/000/011/003/005
B021/B058

AUTHORS: Berkman, A. S., Mel'nikova, I. G., Fedotova, Ye. I.

TITLE: Determination of the True Values of Open Porosity

PERIODICAL: Steklo i keramika, 1960, No. 11, pp. 27 - 29

TEXT: In this study, the authors used new methods of determining the pore volume: saturation of the sample with water after previous heating and the pressing of mercury into the pores of the sample, from which the air was removed. The samples were also saturated with liquids of various surface tension, at low temperature, boiling temperature, and under pressure with prior air removal. Samples of bricks prepared by the plastic and semidry process were used for the experiments, as well as mercury pore gages with low pressure (pores of from 800 to 15 μ diameter) and high pressure (up to 0.02 μ). The values of the open porosity of some samples are listed in Tables 1 and 2. The scheme of the system serving for the saturation of porous materials by steam-heating is shown in a figure, the system devised by T. F. Trebin being mentioned. Special experiments were conducted in order to investigate the dependence of the

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porosity values on the sample dimensions, the results of which can be seen in Table 3. In conclusion, it is stated that the value of open porosity, determined by known methods, is considerably lower than the true value. The method of pressing mercury into the pores of the sample at a minimum pressure of 2,000 atm produces maximum porosity values. There are 1 figure, 3 tables, and 3 Soviet references.

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BERKMAN, A.S.; MEL'NIKOVA, I.G.

Effect of technological factors on the formation of the porous
structure of structural ceramic. Stroi.mat. 7 no.5:34-37 M 1961.
(MIRA 14:6)

(Ceramics) (Building materials)